

Please complete the following problems for homework. Check Mrs. Kent's website for due dates.
THERE MAY BE PROBLEMS ON THE BACK!

1. Write down the next two terms of each sequence.

a. 4, 7, 10, 13, ...

b. 23, 16, 9, 2, ...

2. Write down the next two terms of each sequence.

a. 8, 12, 18, 27, ...

b. 1600, -800, 400, -200, ...

3. Write down the next two terms of each sequence.

a. 5, 6, 8, 11, 15, ...

b. 6, 9, 14, 21, 30, ...

4. Find the first three terms of each sequence from the given term T_n .

a. $T_n = -5n - 8$

b. $T_n = 2n(n - 1)(2n - 1)$

5. Find the 8th term of the sequence from the given T_n .

a. $T_n = 7n + 3$

b. $T_n = \frac{2n-3}{n+1}$

6. The general term of a sequence is $T_n = 5n(4n + 1)$.

a. Find the 4th and the 7th terms.

b. Find the sum of the 4th and the 7th terms.

7. Find the 7th and 8th terms of each sequence.

a. 29, 23, 17, 11, ...

b. 32, 48, 72, 108, ...

8. Find the general term, T_n of each sequence.

a. 5, 12, 19, 26, ...

b. -3, 2, 7, 12, ...

ANSWER KEY

1. Answer
 - a. 16, 19
 - b. $-5, -12$
2. Answer
 - a. 40.5, 60.75
 - b. 100, -50
3. Answer
 - a. 20, 26
 - b. 41, 54
4. Answer
 - a. $-13, -18, -23$
 - b. 0, 12, 60
5. Answer
 - a. 59
 - b. $\frac{13}{9}$
6. Answer
 - a. $4th = 340, 7th = 1015$
 - b. 1355
7. Answer
 - a. $-7, -13$
 - b. 364.5, 546.75
8. Answer
 - a. $T_n = 7n - 2$
 - b. $T_n = 5n - 8$